



United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.		
09/503,778 02/14/2000		Paul Allen Cronce	429032000100	7144		
29141 75	590 11/06/2003		EXAMI	EXAMINER		
SAWYER LAW GROUP LLP P O BOX 51418 PALO ALTO, CA 94303			но, тно	HO, THOMAS M		
			ART UNIT	PAPER NUMBER		
,			2134			
	•	•	DATE MAILED: 11/06/2003	I: /		

Please find below and/or attached an Office communication concerning this application or proceeding.

		T			1924			
		Applicatio	n No.	Applicant(s)	• (,			
	Office Action Summan	09/503,778	3	CRONCE ET AL.				
Office Action Summary		Examiner		Art Unit				
		Thomas M		2134				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b). Status								
1)□	Responsive to communication(s) filed on	·						
2a)□	This action is FINAL . 2b)⊠ Thi	is action is r	non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Disposition of Claims								
4)🖂	4)⊠ Claim(s) <u>1-27</u> is/are pending in the application.							
4a) Of the above claim(s) is/are withdrawn from consideration.								
5) Claim(s) is/are allowed.								
·	Claim(s) <u>1-27</u> is/are rejected.							
·	Claim(s) is/are objected to.							
8) Claim(s) are subject to restriction and/or election requirement. Application Papers								
9)☐ The specification is objected to by the Examiner.								
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.								
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
11) ☐ The proposed drawing correction filed on is: a) ☐ approved b) ☐ disapproved by the Examiner.								
If approved, corrected drawings are required in reply to this Office action.								
12)☐ The oath or declaration is objected to by the Examiner.								
Priority under 35 U.S.C. §§ 119 and 120								
13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).								
a) ☐ All b) ☐ Some * c) ☐ None of:								
	1. Certified copies of the priority documents have been received.							
	2. Certified copies of the priority documents have been received in Application No							
3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received.								
* See the attached detailed Office action for a list of the certified copies not received.								
 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application). a) ☐ The translation of the foreign language provisional application has been received. 								
15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.								
Attachment(s)								
2) Notice	e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (PTO-948) nation Disclosure Statement(s) (PTO-1449) Paper No(s)		4) Interview Summary 5) Notice of Informal F 6) Other:	(PTO-413) Paper No(s) atent Application (PTO-15:				

Art Unit: 2134

DETAILED ACTION

1. Claims 1-27 are pending.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate

A method for operating a portable authorization device paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 3. Claims 1-24, 26 are rejected under 35 USC § 102(b) as being anticipated by Caputo, US patent 5,778,071.

In reference to claim 1:

Caputo discloses a method for selectively authorizing a host system to use one or more items of protected information, comprising the steps of:

- Coupling the portable authorization information from a first type of information authority, where the first information authority is the smartcard disclosed in item 19 of figure 1C. The data from the smartcard is formatted in Caputo(Column 10, lines 18-31)
- Receiving a second item of authorization information from a second type of information authority, where the second type of information authority is the user

Art Unit: 2134

at the keypad who enters identification information such as a PIN number.

Caputo(Column 10, lines 32-50) This data is then transferred to the input/output controller.

Selectively authorizing the host system to use the one or more items of affected information based upon the first or second items of authorization information.
 Caputo(Column 10, lines 56-60) discloses that the encrypt and decrypt functions as part of the authentication process may be performed under control of the microprocessor and/or the smartcard.

Caputo(Column 13, lines 14-24) disclose that the use of the user authentication information is also optional.

In reference to claim 2:

Caputo discloses a portable authorization device for selectively authorizing a host system to use one or more items of protected information comprising:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit; Caputo (Figure 2, Item 166)
- A first interface operative in conjunction with the processing unit and the storage medium for receiving a first item of authorization information from a first type of information authority, where the first interface is the smartcard interface and the first type of information authority is the smartcard. Caputo(Figure 2, Item 178)

Art Unit: 2134

 A second interface operative in conjunction with the processing unit and the storage medium for receiving a second item of authorization information from a second type of information authority, where the second interface is the Modem or network interface. Caputo(Figure 2, Item 160)

- A third interface operative in conjunction with the processing unit and the storage medium for communicating with the host system to selectively authorize the host system to use the one or more items of protected information based upon the first or second items of authorization information. Caputo(Figure 2, Item 12)
- Wherein the portable authorization device is removably couplable to the host system through the third interface. Caputo(Figure 2, Item 12) & Caputo(Figure 1A, Item 12)

In reference to claim 3:

Caputo discloses a device wherein:

- The first interface comprises a direct information authority interface program.
 Caputo(Column 10, lines 24-21)
- The first type of information authority comprises a direct information authority operatively coupled directly to the portable authorization device Caputo(Figure 1C)
- The second and third interfaces each comprise a same host system interface program. Caputo(column 9, lines 28-32)

device. Caputo(Figure 3)

Art Unit: 2134

The second type of information authority comprises an indirect information
authority operatively coupled directly to the portable authorization device, where
the indirect information authority is a network that is operatively coupled to the

In reference to claim 4:

Caputo discloses a portable authorization device, wherein the indirect information authority comprises a computer system coupled to the host system via a network.

Caputo(Figure 3)

In reference to claim 5:

Caputo disclose a portable authorization device, wherein the indirect information authority comprises data stored on a magnetic storage medium, where the magnetic storage medium may be information stored on another computer on the network.

Caputo(Figure 3, Item 36)

In reference to claim 6:

Caputo disclose a portable authorization device further comprising:

A host authorizer operative in conjunction with the processing unit and the third
interface for selectively authorizing the host system to use the one or more items
of protected information based upon the first or second items of authorization
information.

Art Unit: 2134

where the network or computer is made accessible once the verification process is successful, and the authorizer acted in response to information from the smartcard and/or network and other information sources. Caputo(column 17, lines 51-56)

Page 6

In reference to claim 7:

Caputo(column 9, lines 28-32) disclose a device wherein the host authorizer is a software program operatively stored in the storage unit.

In reference to claim 8:

Caputo discloses a device wherein:

- The first and second items of authorization information comprise first and second key selectors, respectively, where the first information authority, the smartcard, and the second information authority, the network, both contains a key selectors. Caputo (Column 14, lines 55-57) & (Column 17, lines 44-54)
- The host authorizer in conjunction with the processing unit and the third interface operatively generates a key based upon the first of second key selectors and selectively authorizes the host system to use the one or more items of protected information based upon the key, where the host authorizer responds to the challenge by establishing or "generating" the right key and then returned to the challenger that the device possesses the right key. If verification is successful, the network may authorize the host system to use the items of protected

Art Unit: 2134

information, the accessibility of the network, or computer software.

Caputo(Column 17, lines 37-56)

In reference to claim 9:

Caputo disclose a portable authorization device, wherein:

the first interface is configured to conduct a challenge response transaction with the first type of information authority, where the first information authority is the smartcard, and the first interface is the Item 178 of Figure 2, the smartcard interface. Caputo (Column 17, lines 37-44)

In reference to claim 10:

Caputo discloses a portable authorization device wherein:

the second interface is configured to conduct a challenge-response transaction with the second type of information authority, where the second interface is the network interface which receives the challenge from the network and the second type of information authority is the network. Caputo (Column 17, lines 30-35)

In reference to claim 11:

Caputo discloses a portable authorization device wherein:

the third interface is configured to conduct a challenge-response transaction with the host system, where the third interface is the interface that communicates with the host

Art Unit: 2134

system and passes an acknowledgement to the host system as part of the challengeresponse transaction. (Column 17, lines 51-56)

Page 8

In reference to claim 12:

- An access control mechanism associated with the host system for receiving a first item of authorization information from a first type of information authority operatively coupled to the host system and for forwarding the item of authorization information to the portable authorization device, where the host system receives items of authorization information from an information authority, or user, and the information is sent to the device. Caputo (Column 15, lines 19-24)
- A portable authorization device removably couplable to the host system for receiving the first item of authorization information from the access control mechanism and for selectively authorizing the host system to use the one or more items of protected information based upon the first item of authorization information, where the device receives the information from host system, and the end result of the device is to authorize the host system to use one or more items of protected information, such as the transmission of encrypted data. Caputo (Column 15, lines 19-24)

Art Unit: 2134

In reference to claim 13:

Caputo discloses an authorization system wherein:

The portable authorization device is configured to also receive a second item of authorization information from a second type of information authority operatively coupled to the portable authorization device and, furthermore, is configured to selectively authorize the host system to use the one or more items of protected information based upon the first or second items of authorization information, where the device, referred to as "device 10" in Caputo, may additionally accept authorization information from a smartcard. (Caputo Figure 1C)

Page 9

In reference to claim 14:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit; Caputo (Figure 2, Item 166)
- A first interface operative in conjunction with the processing unit and the storage medium for receiving a key selector from an information authority; Caputo(Figure 2, Item 178) where the first interface is the smartcard interface, the storage medium and the information authority are the smartcard, and (Column 14, lines 52-65) discloses that the smartcard contains a key selector.

Page 10

Application/Control Number: 09/503,778

Art Unit: 2134

 A host authorizer operative in conjunction with the processing unit and the storage medium for generating a key based upon the key selector.
 Caputo(Figure 8, Item 128)

 A second interface operative in conjunction with the processing unit and the storage medium for communicating with the host system to selectively authorize the host system to use the one or more items of protected information based upon the key. Caputo (Figure 2, Item 174)

In reference to claim 15:

Caputo discloses a portable authorization device wherein:

- The first interface comprises an information authority interface; Caputo(Figure 2, Item 178)
- And the second interface comprises a host system interface. Caputo(Figure 2, Item 174)

In reference to claim 16:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit for storing one or more items of blended authorization information, each item of blended

Art Unit: 2134

authorization information being derived from a plurality of items of authorization information, where the storage medium is the ROM/RAM and stores items of blended information that may be received from a network, a user, a smartcard, or the host computer. Caputo(Figure 2, Item 166)

Page 11

- An unblending mechanism operative in conjunction with the processing unit and
 the storage medium for regenerating at least one of the plurality of items of
 authorization information from the one or more items of blended authorization
 information, where the authorization information is processed and "unblended"
 into the conceptual diagram of figure 4B, where the authorization information is
 encrypted or decrypted and where the private key may be "regenerated" when
 needed in the authorization process. Caputo(Figure 4B)
- A host system interface operative in conjunction with the processing unit and the storage medium for communicating with the host system to selectively authorize the host system to use an item of protected information based upon the at least one item of authorization information Caputo(Figure 2, Item 174)
- Wherein the portable authorization device is removably couplable to the host system through the host system interface. Caputo(Figure 1D, Item 12)

In reference to claim 17:

Caputo discloses a portable authorization device wherein:

 Each item of blended authorization information is derived from the two or more items of authorization information by performing an arithmetic operation on the Art Unit: 2134

two or more items of authorization information, where the arithmetic operation is a modulus, and the items of authorization information are the PIN and the challenge received, and the blended authorization information may be the key, the encrypted data, encrypted using the key, or the final verification itself, which is also derived from two or more items of authorization information. Caputo (Column 17, lines 40-56)

In reference to claim 18:

Caputo discloses a method for operating a portable authorization device for selectively authorizing a host system to use one or more items of protected information comprising the steps of:

- Coupling the portable authorization device to the host system; Caputo(Figure 2, Item 12)
- Receiving a plurality of items of authorization information, where the items of authorization are the PIN, the key, and the challenge. Caputo(Column 17, Lines 37-56)
- Generating one or more items of blended authorization information from the
 plurality of items of authorization information, where the blended information is
 the encrypted key and PIN sent back in response to the challenge.
 Caputo(Column 17, Lines 37-56)

Art Unit: 2134

 Storing the one or more items of blended authorization information in a storage medium, where the authorization information is stored in the memory of the portable authorization device. Caputo(Column 17, Lines 37-56)

- Retrieving one or more of the items of blended authorization information from the storage medium. Caputo(Column 17, Lines 37-56)
- Regenerating at least one of the plurality of items of authorization information
 from the one or more items of blended authorization information, where the
 challenger receives the information and regenerates the data by decrypting it.
 Caputo(Column 17, Lines 37-56)
- Selectively authorizing the host system to use an item of protected information based upon the at least one item of authorization information. Caputo(Column 17, Lines 37-56)

In reference to claim 19:

- A processing unit; Caputo(Figure 2, Item 164)
- A first storage medium operatively coupled to the processing unit for storing one or more encoded items of authorization information; Caputo(Figure 2, Item 166)
- A second storage medium operatively coupled to the processing unit for storing decoding information used to decode the one or more encoded items of

Art Unit: 2134

authorization information, wherein the second storage medium is accessible by the processing unit only if the processing unit receives proper authorization;

Caputo(Column 14, Lines 57-65)

- A decoding mechanism operative in conjunction with the processing unit and the
 first and second storage media for decoding at least one of the one or more
 encoded items of authorization information to produce at least one respective
 item of authorization information, where the data is taken from the storage
 medium from the ROM/RAM, and the smartcard, and enters a decryption
 module, or decoding mechanism. Caputo(Figure 4A)
- An interface operative in conjunction with the processing unit for communicating
 with the host system to selectively authorize the host system to use an item of
 protected information based upon the at least one item of authorization
 information. Caputo(Figure 2, Item 174)

In reference to claim 20:

- A processing unit; Caputo(Figure 2, Item 164)
- A first storage medium operatively coupled to the processing unit for storing one or more encoded items of authorization information; Caputo(Figure 2, Item 166)

Art Unit: 2134

A second storage medium operatively coupled to the processing unit for storing a
plurality of items of decoding information.; Caputo(Column 14, Lines 55-57)

Page 15

- A decoding mechanism operative in conjunction with the processing unit and the first and second storage media for decoding at least one of the one or more encoded items of authorization information using a selected one of the plurality of items of decoding information to produce at least one respective item of authorization information, where the data is taken from the storage medium from the ROM/RAM, and the smartcard, and enters a decryption module, or decoding mechanism, and the respective item of authorization information is the decrypted data used in verification(verify data). Caputo(Figure 4A)
- An interface operative in conjunction with the processing unit for communicating
 with the host system to selectively authorize the host system to use an item of
 protected information based upon the at least one item of authorization
 information. Caputo(Figure 2, Item 174)

In reference to claim 21:

Caputo discloses a portable authorization device comprising:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit; Caputo(Figure 2, Item 166)
- A first interface operative in conjunction with the processing unit and the storage medium for the receiving a first item of information from a first information

Art Unit: 2134

authority, where the first information authority is the smartcard interface. (Figure 2, Item 166)

Page 16

 A second interface operative in conjunction with the processing unit and the storage medium for transmitting a second item of information to a second information authority, where the storage medium is the ROM/RAM and the second information authority is the network. (Figure 2, Item 160)

In reference to claim 22:

Caputo discloses a portable authorization device wherein:

- The first item of information comprises an item of authorization information for selectively authorizing a host system to use one or more items of protected information, where the first item of information is the key. Caputo(Column 14, lines 53-57)
- The second item of information is the same as the first item of information, where
 the second item of information is the same key as the first item of information that
 is retransmitted back onto the network in response to the challenge to verify its
 correctness. Caputo(Column 17, 44-48)
- The portable authorization device disables or removes the item of authorization from therein upon transmission to the second information authority, where the item of authorization is "disabled" or rendered into a form in which it cannot be used for its intended use, by being encrypted. Caputo(Column 17, 44-48)

Art Unit: 2134

In reference to claim 23:

Caputo discloses a portable authorization device wherein:

the second information authority is a second portable authorization device, where the portable authorization device is referred to as device 10, and the second device may incorporate all the communications security functions device 10 is connected with in a single portable device in accordance with the invention of Caputo(Column 15, 53-58) & Caputo (Column 11, lines 12-14)

Caputo.(Column 15, 53-58) refers to figure 3, where the second information authority is connected to the first portable authorization device through the network interface.

In reference to claim 24:

Caputo discloses a portable authorization device, comprising:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit; Caputo(Figure 2, Item 166)
- A message manager operative in conjunction with the processing unit and the storage medium for determining whether the portable authorization device is authorized to receive an item of authorization information from an information authority, where the message manager prompts the user for a PIN number, which is used in determining if the device is authorized to read the Key from the

Art Unit: 2134

smartcard information authority. Caputo(Column 17, Lines 37-44) & Caputo(Column 14, Lines 53-61)

An interface operative in conjunction with the processing unit, the storage
medium and the message manager for receiving the item of authorization
information from the information authority if the portable authorization device is
authorized to receive the item of authorization information. Caputo(Figure, Item
178)

In reference to claim 26:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit; Caputo(Figure 2, Item 166)
- A password manager operative in conjunction with the processing unit and the storage medium for determining if a predetermined password authorization condition is satisfied with respect to the host system and if not, obtaining and verifying a password entered by a user, where the password is a PIN.
 Caputo(Column 14, lines 55-65)
- An interface operative in conjunction with the processing unit, the storage
 medium and the password manager for communicating with the host system to

Art Unit: 2134

selectively authorize the host system to use the one or more items of protected information only if the predetermined password authorization condition is satisfied. Caputo(Column 17, lines 37-56)

Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claim 25 and 27 are rejected over Caputo, US patent 5,778,071. In reference to claim 25:

- A processing unit; Caputo(Figure 2, Item 164)
- A storage medium operatively coupled to the processing unit for storing data.
 Caputo(Figure 2, Item 166)
- An interface operative in conjunction with the processing unit and the storage medium for communicating with the host system to selectively authorize the host system to use a subset of the set of items of protected information.
 Caputo(Figure 2, Item 174)

Art Unit: 2134

Caputo however fails to explicitly disclose that the storage medium stores a counter

associated with a set of items of protected information, and additionally fails to disclose

an interface that selectively authorizes the host system to use based upon the value of

the enable field and the

counter.

The examiner takes official notice that the use of counters, and enable fields as items of

authorization information to authorize, in particular, the use of software, is well known in

the art of Content Distribution, which frequently employ a counter, to allow access to

content a certain number of times, and an enable field, which indicates whether access

should be enabled or disabled. The advantage of using this allows an exact and limited

access to software or content, as opposed to granting unlimited access to digital

content, or completely restricting access.

It would have been obvious to one of ordinary skill in the art at the time of

invention to apply the use of a counter and an enable field to allow authorization of

protected information, given the advantage of allowing limited access to protected

information.

In reference to claim 27:

Caputo discloses a system for reconstructing a portable authorization device,

comprising:

 A portable authorization device that operatively stores one or more items of authorization information for selectively authorizing a host system to use one or more items of protected information. Caputo(Figure 2)

However Caputo fails to explicitly disclose an embodiment where the reconstruction data is disposed on the host for reconstructing the authorization information.

The examiner takes official notice that it is well known in the art that the host system which contains the information or content, from which access is being sought, may itself act as the authorizing authority, where the authorizing authority similarly contains all the authorizing information it requires of a user in order to verify the user without having to contact a third party authority each time.

For example, Schull, US patent 5,509,070 discloses a system where the user acquires software, and then purchases the license online. Once the system installs the authorization information onto the host from the network, future accesses are verified by the host system alone. The host system "reconstructs" the data necessary to authorize the user, in order to be able to compare the user's authorization information with the accepted authorization information.

It would have been obvious to one of ordinary skill in the art at the time of invention to implement the host system as challenger given the advantage of avoiding the overhead and use of a third party remote challenge system, thereby meeting a

Art Unit: 2134

system where the reconstruction data is disposed on the host system for reconstructing

the items of authorization information stored in the portable authorization device.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Thomas M Ho whose telephone number is (703)305-

8029. The examiner can normally be reached on M-F from 8:30am – 5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Gregory A. Morse can be reached at (703)308-4789. The fax phone

numbers for the organization where this application or proceeding is assigned are

(703)746-7239 for regular communications and (703)746-7238 for After Final

communications.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to the receptionist whose telephone number is (703)306-

5484.

TMH

October 24th, 2003

TECHNOLOGY CENTER 2100

Art Unit: 2134